CLAIMS

What is claimed is:

1. In a data processing system having a memory, an operating system executing within said data processing system comprising:

a debug support module configured to associate a debug flag with debug commands issued within the data processing system; and

a kernel module coupled for communication with said debug support module, said kernel module comprising:

a process creation unit configured to spawn special processes for commands issued which having a debug flag, said special processes having a debug flag indicator set; and

a messaging transfer unit configured to transfer messages from a source process to a destination process, said message transfer unit further configured to associate a debug flag indicator into said destination process if said source process includes said debug flag indicator.

2. The operating system of claim 1, wherein said kernel further comprises a memory management unit configured to allocate the memory into a main memory pool and a reserve memory pool, said memory management unit further

configured to allocate memory from said reserve memory pool only to said special processes.

3. The operating system of claim 2, wherein said memory management unit is further configured to allocate memory to processes from said main memory pool, said memory management unit further configured to allocated memory to said special processes from said reserve memory pool when said main memory pool is depleted.

4. The operating system of claim 1, wherein said process creation unit is further configured to spawn regular processes for commands issued which lack a debug flag, said regular processes lacking a debug flag indicator;

5. In a data processing system having a memory, a method for inheriting memory management policies from a source process to a destination process comprising:

receiving a message for transfer from the source process to the destination process;

determining if said source process is associated with a debug flag;

associating a debug flag into said destination process if said source process is associated with a debug flag; and

communicating the message to the destination process.

6. The method of claim 5 further comprising:

determining if a debug/management command is issued within the data processing system;

spawning a new process associated with the debug/management command; and

associating a debug flag with said new process to identify said new process as a debug process.

7. The method of claim 5, further comprising:

allocating the memory into a main memory pool and a reserve memory pool;

receiving a memory allocation request from a requesting process;

allocating memory to said requesting process form the main memory pool;

8. The method of claim 7, further comprising:

determining if said main memory pool is depleted;

determining is said requesting process is associated with a debug flag; and

allocating memory to said requesting process from the reserve memory pool if said main memory pool is depleted and said requesting process is associating with a debug flag.

9. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for inheriting memory management policies from a source process to a destination process in a data processing system having a memory, said method comprising:

receiving a message for transfer from the source process to the destination process;

determining if said source process is associated with a debug flag;

associating a debug flag into said destination process if said source process is associated with a debug flag; and

communicating the message to the destination process.

10. The program storage device of claim 9, said method further comprising:

determining if a debug/management command is issued within the data processing system;

spawning a new process associated with the debug/management command; and

associating a debug flag with said new process to identify said new process as a debug process.

11. The program storage device of claim 9, said method further comprising:

allocating the memory into a main memory pool and a reserve memory pool;

receiving a memory allocation request from a requesting process;

allocating memory to said requesting process form the main memory pool;

12. The program storage device of claim 11, said method further comprising:

determining if said main memory pool is depleted;

determining is said requesting process is associated with a debug flag; and

allocating memory to said requesting process from the reserve memory pool if said main memory pool is depleted and said requesting process is associated with a debug flag.

13. In a data processing system having a memory, an operating system executing within said data processing system comprising:

means for receiving a message for transfer from the source process to the destination process;

means for determining if said source process is associated with a debug flag;

means for associating a debug flag into said destination process if said source process is associated with a debug flag; and

means for communicating the message to the destination process.

14. The operating system of claim 13 further comprising:

means for determining if a debug/management command is issued within the data processing system;

means for spawning a new process associated with the debug/management command; and

means for associating a debug flag with said new process to identify said new process as a debug process.

15. The operating system of claim 13, further comprising:

means for allocating the memory into a main memory pool and a reserve memory pool;

means for receiving a memory allocation request from a requesting process;

means for allocating memory to said requesting process form the main memory pool;

16. The operating system of claim 15, further comprising:

means for determining if said main memory pool is depleted;

means for determining is said requesting process is associated with a debug flag; and

means for allocating memory to said requesting process from the reserve memory pool if said main memory pool is depleted and said requesting process is associated with a debug flag.